UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,921	08/04/2003	Joel D. Kamentz	343355600074	4939

7590 03/09/2006

John V. Biernacki
Jones Day
North Point
901 Lakeside Avenue
Cleveland, OH 44114

EXAMINER	
SOMMERFELD, PAUL J	

ART UNIT	PAPER NUMBER
2168	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,921	KAMENTZ ET AL.	
	Examiner	Art Unit	
	Paul J. Sommerfeld	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/6/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 6, 10-12, 14-16, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hiller et al (U.S. Patent Number 6,658,659 B2).

As to claim 1, Hiller et al teaches method for selecting a resource for use during execution of a software application (col. 4 lines 3-5), the method comprising the steps of:

(a) receiving at least a portion of a software application for local execution (item 402 in Fig. 4);

(b) determining a resource to be used during local execution of the received software application portion (col. 3 line 67 through col. 4 line 2);

(c) determining a set of one or more compatible versions of the determined resource for use with the received portion (col. 4 lines 46-54); and

(d) locating a compatible version from the determined set for local execution in conjunction with the received portion from a data store capable of storing a plurality of versions of one or more resources (col. 4 lines 13-15).

As to claim 2, Hiller et al teaches the step of locating the compatible version for local execution comprises the steps of:

(i) searching the local data store for one or more versions of the determined resource (col. 4 lines 13-15);

(ii) identifying the compatible version from the one or more versions resulting from searching the data store (col. 4 lines 15-19).

As to claim 5, Hiller et al teaches the step of (e) locally executing the received portion of the software application in conjunction with the located compatible version (col. 4 lines 5-8).

As to claim 6, Hiller et al teaches the step of determining the resource required for local execution comprises the steps of:

(i) accessing a configuration file based upon the received portion (col. 10 lines 12-14); and

(ii) retrieving identification information indicative of the resource from the accessed configuration file (col. 10 lines 14-15).

As to claim 10, Hiller et al teaches the configuration file stores information indicative of at least one resource required for local execution associated with each of a plurality of potential received portions of one or more software applications (col. 8 lines 51-63, the compatibility vector indicates components that contain functions called by the primary module. Since the components contain functions called by the primary module, the components are required for execution.).

As to claim 11, Hiller et al teaches the configuration file stores information indicative of a plurality of resources (col. 8 line 63 through col. 9 line 2, indicating three components, where "resources" is read on "components").

As to claim 12, Hiller et al teaches the step of determining the resource required for local execution comprises the steps of:

(i) analyzing the received software application portion for information indicative of the resource (col. 10 lines 12-14); and

(ii) identifying the resource based upon the information indicative of the resource (col. 10 lines 14-15).

As to claim 14, Hiller et al teaches the step of (e) repeating steps (b) through (d) with respect to one or more additional required resources (col. 10 lines 17-30).

As to claim 15, Hiller et al teaches the repetition step continues until all required resources for the received application portion have been determined (col. 10 lines 27-30).

As to claim 16, Hiller et al teaches steps (b) through (d) execute a plurality of times in parallel with respect to a plurality of required resources (col. 10 lines 17-30).

As to claim 20, Hiller et al teaches a system to select a resource for use during local execution of a software application, the system comprising:

(a) receiving means for receiving at least a portion of a software application (col. 4 line 61, where "receiving means" is read on "memory");

(b) resource requirement means for determining one or more resources required for local execution of the received software application portion and for determining a set of one or more resource versions compatible with the received software application portion for each determined required resource (col. 4 line 62, where "resource requirement means" is read on "processor");

(c) resource storage means for storing a plurality of versions of at least one resource (col. 5 lines 2-3, where "storage means" is read on "secondary memory");

(d) resource location means for identifying in the resource storage means a compatible version of each determined required resource from the resource requirement means based on the set of one or more resource versions for each determined required resource and for retrieving the compatible version for each determined required resource for which no compatible version was present in the resource storage means during initial identification and identifying the retrieved compatible version for each such required resource (col. 4 line 62, where "resource location means" is read on "processor"); and

(e) resource loading means to load one or more resources located by the resource location means for local execution in conjunction with the received software application portion (col. 4 lines 63-64, where "resource loading means" is read on "loader"); and

(f) processing means for executing the received software application portion in conjunction with the one or more loaded resources loaded by the resource loading means (col. 4 lines 62-63, where "processing means" is read on "processor").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 4, 18, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller et al (U.S. Patent Number 6,658,659 B2) as applied to claim 2 above, and further in view of Jai (Jai, Benchiao, "RADIUS: Rapid Application Delivery, Installation and Upgrade System", Nov 23-26 1998, Computer Science Department New York University, pp. 180-186).

As to claim 3, Hiller et al does not explicitly teach the step of locating the compatible version for local execution further comprises the step of (iii) retrieving the compatible version from a resource server and (iv) storing the retrieved compatible version in the data store, if the one or more versions resulting from the search does not include the determined compatible version.

Jai teaches the step of locating the compatible version for local execution further comprises the step of (iii) retrieving the compatible version from a resource server (p. 182 lines 21-22) and (iv) storing the retrieved compatible version in the data store, if the one or more versions resulting from the search does not include the determined compatible version (p. 182 lines 21-22).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified Hiller et al by the teachings of Jai, because adding the capability of retrieving a compatible version from a resource server and storing the retrieved version facilitates the delivery, installation, and upgrade of software (Jai p. 186 lines 11-12).

As to claim 4, Hiller et al, as modified, teaches the step of storing the retrieved compatible version comprises the steps of:

(A) determining a storage location in the data store based upon metadata associated with the retrieved compatible version (Jai p. 185 lines 48-49, where "metadata" is read on "class name"); and

(B) storing the retrieved compatible version in the determined storage location (Jai p. 182 lines 21-22).

As to claim 18, Hiller et al, as modified, teaches one or more computer readable media storing instructions that upon execution by a system processor cause the system processor to select a resource for use during local execution of a software application (Hiller et al col. 4 lines 34-36) by performing the steps comprising of:

(a) receiving at least a portion of a software application for local execution (Hiller et al item 402 in Fig. 4);

(b) determining a resource required for local execution from the received software application portion (Hiller et al col. 3 line 67 through col. 4 line 2);

(c) determining a set of one or more compatible versions of the determined resource for use with the received portion based upon the received portion (Hiller et al col. 4 lines 46-54);

(d) locating a compatible version from the determined set for local execution in conjunction with the received portion from a data store capable of storing a plurality of versions of one or more resources (Hiller et al col. 4 lines 13-15);

(e) if locating the compatible version initially fails because the compatible version is not stored in the data store:

(i) retrieving the compatible version from a resource server (Jai p. 182 lines 21-22); and

(ii) storing the retrieved compatible version in the data store (Jai p. 182 lines 21-22) by performing the steps comprising of:

(A) determining a storage location in the data store based upon metadata associated with the retrieved compatible version (Jai p. 185 lines 48-49, where "metadata" is read on "class name"); and

(B) storing the retrieved compatible version in the determined storage location (Jai p. 182 lines 21-22).

As to claim 19, Hiller et al, as modified, teaches storing further instructions that upon execution by a system processor cause the system processor to perform the additional step comprising of (f) repeating steps (b) to (e) with respect to a plurality of resources required for execution by the received software application portion (Hiller et al col. 10 lines 17-30).

As to claim 21, Hiller et al, as modified, teaches a system to select a resource for use during local execution of a software application (Hiller et al col. 4 lines 58-59), the system comprising;

(a) a data store capable of storing application software and one or more versions of one or more resources for local execution in connection with the application software (Hiller et al col. 5 lines 2-3);

(b) a system processor in communication with the data store, wherein the system processor comprises one or more processing elements (Hiller et al col. 4 lines 62-63) and wherein the one or more processing elements are programmed or adapted to:

(i) receive at least a portion of a software application for local execution (Hiller et al item 402 in Fig. 4);

(ii) determine a resource required for local execution from the received software application portion and a set of one or more compatible versions of the resource for use with the received portion (Hiller et al col. 3 line 67 through col. 4 line 2, Hiller et al col. 4 lines 46-54);

(iii) search the data store for a located compatible version from the determined set (Hiller et al col. 4 lines 13-15);

(iv) retrieve and store in the data store a member of the determined set as the located compatible version if no member of the determined set is found in the data store from the search (Jai p. 182 lines 21-22)

(v) execute the received software application portion locally in conjunction with the located compatible version (Hiller et al col. 4 lines 5-8).

5. Claims 7-9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller et al (U.S. Patent Number 6,658,659 B2) as applied to claims 1 and 6 above, and further in view of Hovemeyer et al (Hovemeyer, David and Pugh, William, "More Efficient Network Class Loading through Bundling", March 5 2001, Department of Computer Science University of Maryland, pp. 1-5).

As to claim 7, Hiller et al does not explicitly teach the step of determining the resource required for local execution further comprises the step of (iii) receiving the configuration file from a remote server.

Hovemeyer et al teaches the step of determining the resource required for local execution further comprises the step of (iii) receiving the configuration file from a remote server (p. 1 col. 1 lines 24-26, p. 3 col. 1 line 8, where "configuration file" is read on "Jar index").

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified Hiller et al by the teachings of Hovemeyer et al, because adding the capability of receiving the configuration file from a remote server enables the transfer of class files and resources to a client from a server (Hovemeyer et al p. 1 col. 1 lines 24-26).

As to claim 8, Hiller et al, as modified, teaches the step of determining the resource required for local execution further comprises the step of (iv) requesting the configuration file from the remote server (Hovemeyer et al p. 4 col. 1 lines 11-12).

As to claim 9, Hiller et al, as modified, teaches the step of determining the resource required for local execution further comprises the step of (iii) updating the configuration file (Hovemeyer et al p. 4 col. 2 lines 5-8).

As to claim 13, Hiller et al, as modified, teaches the step of determining the resource required for location execution comprises the steps of:

(i) requesting information indicative of the resource from a server computer associated with the received software application portion (Hovemeyer et al p. 4 col. 1 lines 6-7 and 11-12); and

(ii) identifying the resource based upon the information indicative of the resource (Hovemeyer et al p. 3 col. 1 lines 12-13).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller et al (U.S. Patent Number 6,658,659 B2).

As to claim 17, Hiller et al teaches the method of claim 1, as discussed above. However, Hiller et al does not teach a method of distributing executable code to select a resource for use during local execution of a software application, the method comprising

the steps of providing an interface to a user that upon submission to a software distribution server causes the distribution server to transmit a plurality of executable instructions that upon execution by a system processor cause the system processor to perform the method of claim 1. Nevertheless, providing an interface by which a user can submit a request for data to a server and subsequently receive the requested data is notoriously well known in the art. The file-download capability provided by a web browser is a commonly known example of this. The Examiner takes OFFICIAL NOTICE of this teaching. It would have been obvious to one skilled in the art at the time the invention was made to have provided an interface for distribution of executable code because it would enable users to request and subsequently receive executable code from a server. The following reference provides a disclosure of downloading files using a web browser: McFedries, Paul, "Complete Idiot's Guide to Windows XP, The", October 3 2001.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- "Local Cache for Server Files", IBM Technical Disclosure Bulletin, March 1 1993, vol. 36, issue 3, for teaching caching of files received from a server.
- U.S. Pat. No. 5,5791,509 A, issued to Furtney et al, for teaching a method of verifying compatibility of system components.

- U.S. Pat. No. 6,343,308 B1, issued to Marchesseault for teaching a method for mixing different versions of Java classes

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul J. Sommerfeld whose telephone number is 571 272-6545. The examiner can normally be reached on M-F 7:45 am - 4:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on 571 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TIM VO
PRIMARY EXAMINER